



Transmission Services

Dynamic Transfer Operating and Scheduling Requirement Version 4

Response to Customer Comments

Posted:

This document contains the Transmission Customer comments and Transmission Services' response to those comments for the Dynamic Transfer Operating and Scheduling Requirement Version 4 Business Practice posted for review from September 8th, 2014 through September 24^h, 2014

Thank you for your comments.

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PacifiCorp

PacifiCorp requests that BPA revise this business practice to clearly delineate requirements applicable to any customer using California-Oregon Intertie (“COI”) Dynamic Transfer Capability (“DTC”), including those requirements applicable to Transmission Customers of other AC Intertie Facility Owners that BPA will require in its role as the COI path operator. PacifiCorp suggests that the business practice could be divided into different COI DTC sections depending on the role that BPA is assuming and the functions it is performing (i.e., path operator over all customers using COI DTC or transmission provider to BPA customers using COI DTC).

Transmission Service’s Response

While this business practice applies to BPA customers, the business practice revisions seek to further clarify requirements that apply only to BPA customers as opposed to requirements that apply to any use of COI DTC. BPA has also clarified functions it performs as path operator, such as limiting dynamic transfers during the operating hour to protect COI reliability. BPA will take these comments into consideration with future business practice revisions.

Powerex

Powerex greatly appreciates the opportunity to comment on the proposed “Dynamic Transfer Operating and Scheduling Requirements, Version 4” business practice.

Powerex understands the proposed business practice was developed as a result of Bonneville’s commitment to its transmission customers to review the California-Oregon Intertie Dynamic Transfer Capability (“COI DTC”) allocation process in the context of an anticipated increase in the number of customers requesting COI DTC. The allocation methodology under the existing business practice allocates available COI DTC equally among all customers requesting it. As a practical matter, this allocation has been largely untested due to the limited number of customers actually requesting COI DTC. Nevertheless, customers had raised concerns about the potential for discriminatory outcomes under the existing allocation methodology if and when multiple customers requested COI DTC.

In Powerex’s opinion, the proposed business practice is a very positive and proactive step toward developing an allocation methodology that is consistent with the non-discriminatory principles of Bonneville’s OATT. Powerex is very appreciative of the collaborative efforts of Bonneville, as well as the other COI facility owners, PacifiCorp and Portland General Electric, in developing the methodology in the proposed business practice. Powerex offers the following comments and suggestions, and looks forward to working with Bonneville to potentially improve the business practice, if necessary, as Bonneville and its customers gain experience with its implementation

Transmission Service’s Response

“Total Share Weighting” Methodology

The proposed allocation methodology consists of two steps. First, COI DTC is allocated on a pro rata basis among the three transmission owners based on proportionate ownership share. Second, each transmission owner allocates its allocated share of COI DTC among their respective transmission customers that request COI DTC, based on each customer's Long-Term Firm transmission rights. The proposal also appropriately includes provisions to allocate no more DTC to a customer than the amount requested and to ensure that all DTC is allocated to the maximum extent possible. In Powerex's view, the proposal also includes an unnecessary "weighting factor" based on the size of a customer's DTC request relative to the size of other requests. By including the size of a customer's request as a weighting determinant (as opposed to merely a cap on the amount allocated to the respective customer) Powerex believes the proposed methodology is unnecessarily complex.

Consider the following example involving two customers, "Customer 1" and "Customer 2":

- Total COI DTC available for allocation = 200 MW
 - Bonneville Transmission's share of the total COI DTC = 143 MW
- Customer 1 and Customer 2 are the only Bonneville customers requesting DTC
 - Customer 1 owns 525 MW of Firm and requests 100 MW of DTC.
 - Customer 2 owns 250 MW of Firm and requests 200 MW of DTC

An allocation based strictly on each requesting customer's Long-Term Firm reservations would lead the following result:

Customer 1

- Proportional share of Long-Term Firm reservations: $525 / (525 + 250) = 67.7\%$
- $67.7\% * \text{Bonneville COI DTC (143 MW)} = 97 \text{ MW}$

Customer 2

- Proportional share of Long-Term Firm reservations: $250 / (525 + 250) = 32.2\%$
- $\approx 32.2\% * \text{Bonneville COI DTC (143 MW)} = 46 \text{ MW}$

This outcome is consistent with the principles that (1) DTC should be allocated on a pro rata basis among customers based on their Long-Term Firm transmission rights; and (2) DTC should be fully allocated among the customers requesting DTC. Simply put, Customer 1 receives approximately twice as much DTC service since Customer 1 invested in approximately twice as much Long-Term Firm transmission service.

However, under Bonneville's proposed "Total Share Weighting" methodology, the allocation of DTC depends in part on the quantity of each customer's DTC request. Since Customer 1's request is only one third of the total DTC requests, their request gets weighted by one third, and customer 2's request gets weighted to two thirds. The end result is shown below:

Customer 1 weight

- $\approx \text{Proportional share of Long-Term Firm reservations: } 525 / (525 + 250) = 67.7\%$
- $\approx \text{Proportional share of DTC requests: } 100 / (100 + 200) = 33.3\%$
- $\approx \text{Total customer weight: } 67.7\% * 33.3\% = 0.226$

Customer 2 weight

- $\approx \text{Proportional share of Long-Term Firm reservations: } 250 / (525 + 250) = 32.2\%$
- $\approx \text{Proportional share of DTC requests: } 200 / (100 + 200) = 66.7\%$
- $\approx \text{Total customer weight: } 32.2\% * 66.7\% = 0.215$

Final allocation:

- Customer 1: $0.226 * (0.226 + 0.215) * \text{Bonneville COI DTC (143 MW)} = 73 \text{ MW}$
- Customer 2: $0.215 * (0.226 + 0.215) * \text{Bonneville COI DTC (143 MW)} = 70 \text{ MW}$

On the September 18, 2014 call, Bonneville explained that the purpose of the “Total Customer Weighting” methodology was to use the size of a customer’s DTC request as an indicator of a customer’s need for, and commitment to, the use of DTC (i.e., the bigger the request, the bigger the need and commitment).

In Powerex’s opinion, the size of a DTC request should not be used as an indicator of a customer’s need for, or commitment to, the use of DTC. Dynamic scheduling—like hourly or 15-minute scheduling—is simply one manner in which Long-Term Firm transmission service may be used. A more appropriate measure of a customer’s need for, or commitment to, the use of DTC, is therefore the customer’s underlying investment in Long-Term Firm transmission service.

A customer’s request volume for DTC should serve merely as a cap on the amount awarded and not as a weighting factor in the allocation when total requests exceed total DTC service. Powerex suggests that Bonneville modify its business practice to allocate DTC service pro rata on the basis of requesting customers’ Bonneville Long-Term Firm reservations. This would align Bonneville’s allocation of DTC service among its transmission customers with the allocation of DTC among the transmission owners, and would address the concerns outlined above.

Transmission Service’s Response

BPA believes that the amount of DTC requested is a legitimate indicator of DTC demand, which BPA and the other COI owners believe should be taken into account in allocating COI DTC. An entity that wishes to maximize its allocation of DTC should request as much DTC as it can—either the DTC limit or its reservation rights.

BPA will monitor the allocation of COI DTC and consider recommending changes to the other COI owners should circumstances warrant.

PPL EnergyPlus, LLC

PPL EnergyPlus (EPLU) appreciates the opportunity to submit comments on the proposed Version #4 Dynamic Transfer Operating and Scheduling Requirements. EPLU’s comments are general in nature and not specific to any one section of the proposed Version #4. EPLU is concerned whether EIM implementation will adversely affect current BPA system operations and are summarized as follows:

Transmission Service’s Response

BPA has addressed many of these questions through its stakeholder process, which has included discussion of concerns raised and potential solutions. We encourage you to review the materials posted on our stakeholder website for background on how BPA has worked maintain the level of transmission service for our other customers (<http://www.bpa.gov/transmission/CustomerInvolvement/Energy-Imbalance-Market/Pages/default.aspx>).

- Potential for adverse effects on existing transmission customer's firm transmission Rights

Transmission Service's Response

An allocation of COI DTC requires firm COI transmission. Use of COI DTC does not affect other customer's COI transmission rights.

- Potential for increased schedule curtailments

Transmission Service's Response

Use of COI DTC does not increase schedule curtailments for other customers.

Potential for reductions in main grid ATC

Transmission Service's Response

The current business practice changes only affect the allocation of COI DTC, not BPA's main grid. The COI DTC allocation is for the use of firm transmission. It does not impact ATC on either the COI or on BPA's main grid.

4) Potential for increased intra-hour changes for other BPA customers

Transmission Service's Response

Dynamic transfers on the main grid or COI do not affect other BPA customers' schedules or power flow.

Please explain how BPA plans to ensure the EIM implementation will not negatively affect its main grid operations and existing transmission customers using the main grid.

Transmission Service's Response

The SCED operator in an EIM will be required to maintain market flows on BPA's main grid within allowed upper and lower limits on each flowgate for which EIM resources have a non-*de minimis* impact. All of the proposed EIM resources that utilize BPA's system currently have firm transmission. The upper and lower limits are based on their historic dynamic impact on BPA's system by PacifiCorp. This control framework is also

discussed in much greater detail on BPA’s PAC/CAISO stakeholder website, as well as in BPA’s Use of Upper and Lower Transfer Limits BP.

Iberdrola Renewables

Iberdrola Renewables appreciates the opportunity to comment on the Draft Business Practice “Dynamic Transfer Operating and Scheduling Requirements Version 4”. Iberdrola is supportive of this revised practice and believes it represents significant improvement over the prior version. Iberdrola is appreciative in that the revised business practice allows parties to more fully maximize the dynamic transfer capabilities of the intertie. Iberdrola also strongly supports the new allocation methodology, as it more appropriately takes into account an entities’ investment in long-term transmission rights.

Transmission Service’s Response

BPA appreciates Iberdrola Renewables’ support.